



WOER WOER HEAT-SHRINKABLE MATERIAL



Important Notice

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Separable Connectors and Kits

STOCK CODE:002130

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Global Solution Provider

Shenzhen Woer Heat-shrinkable Material Co., Ltd (Stock Code: 002130) is a high-tech enterprise with headquarter in Shenzhen, China. Founded in 1998, Woer has undergone dynamic growth and become one of the largest manufacturers of heat & cold shrinkable insulation material.

For more than 15 years, the Woer brand has always been a guarantee for the supply of products and services. From product design and raw materials purchasing to final inspection and testing, Woer has a perfect quality assurance program covering the entire production process. So far, we have been successfully certified by ISO 9001, ISO 14001, ISO/TS 16949, UL, CSA, 3C, etc. Also, we've got the Type Test certification from KEMA in 2007, and our high voltage lab as well as material lab was authenticated by CNAS in 2011.

Woer Power Division, a major part of Woer Corporation, is well-known for its outstanding products and professional services. For more than 15 years, Woer Power Division has been developing, manufacturing and marketing a broad range of cable accessories for reliable power delivery. And it has made tremendous contribution to the innovation of product design and manufacture. All our experiences, together with a strong commitment to R&D, have prepared us to be a global solution provider in cable accessories industry.

At Woer, we know this can be done.



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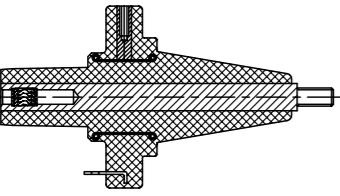
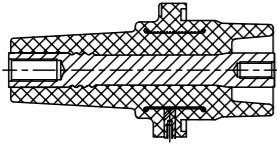
Separable Connectors Mated with EN50180&50181

Woer produces a range of separable Elbow, Straight and Tee connector kits. Our separable connectors are widely used in switchgears, transformers, cabinets and other electrical equipments. It is made of EPDM or silicone rubber with integrated field control. Woer adopts advanced triple-layer (a conductive inner layer, an insulation layer and a conductive outer layer) injection technique to guarantee the interface property to avoid gaps between layers and decrease partial discharge maximally. Our separable connectors are mainly delivered in 3-phase kit. Each kit contains all the necessary accessories.

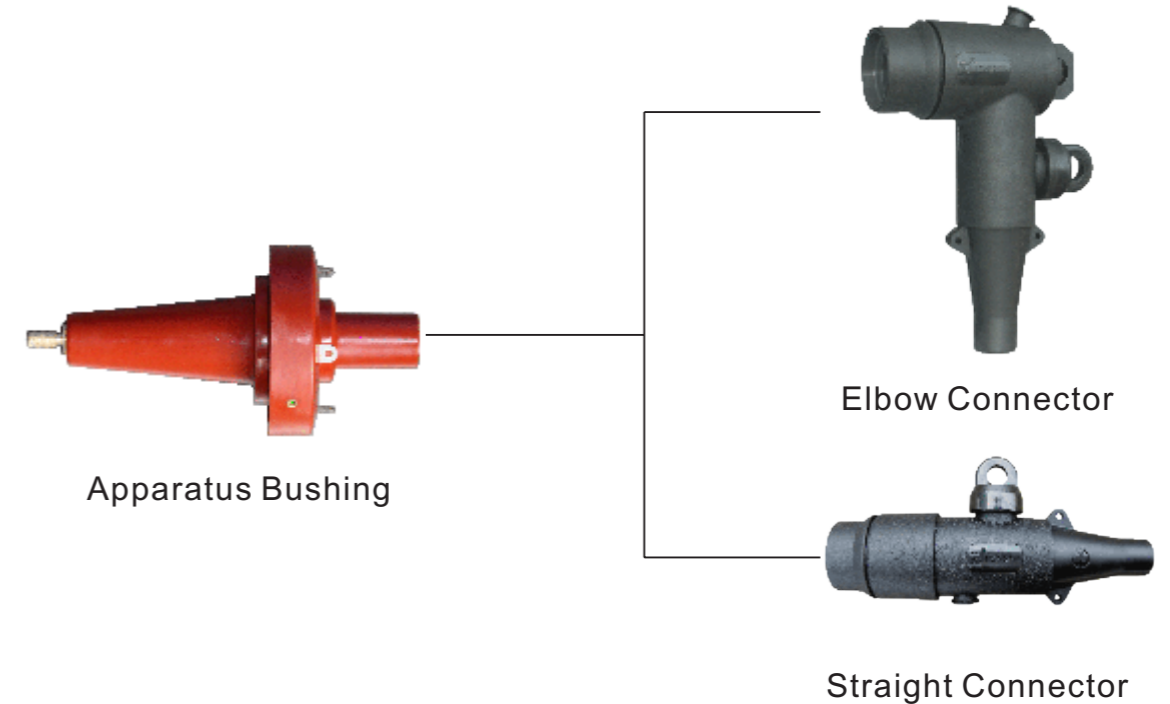
Woer products have been designed and tested per IEC and other industry standard including:

Standard	Description
EN 50181	Plug-in type bushings above 1kV up to 52kV and from 250A to 2.5kA for equipment other than liquid filled transformers
EN 50180	bushings above 1kV up to 36kV and from 250A to 3.15kA for liquid filled transformers
IEC 60502.4	power cable with extruded insulation and their accessories for rated voltages from 1kV(U=1.2kV) up to 30kV(U=36kV)-part 4: test requirements on accessories for cable with rated voltages from 6kV up to 30kV(U=36kV)
IEC 60099	Metal oxide surge arresters without gaps for a.c. systems
JB/T 8952	Polymer-housed metal oxide surge arresters without gaps for a.c. systems

Brief instruction for bushing interface according to EN50180&50181

Bushing Interface	Voltage Class	Interface Description	Standard
250A Series Apparatus Bushing 	15kV,24kV	250A Sliding	EN50180&50181 Interface type A
630A Series Apparatus Bushing 	15kV,24kV	630A Bolted	EN50180&50181 Interface type C

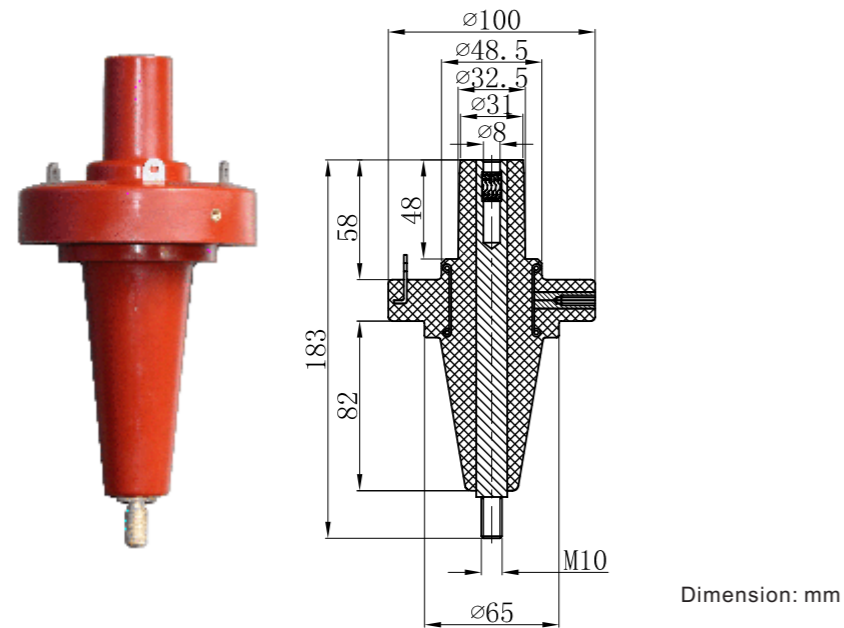
250A Serial Deadbreak



Typical Components of 250A Deadbreak Separable Insulated Connector System



250A Apparatus Bushing (WETGZ-24/250)



Description

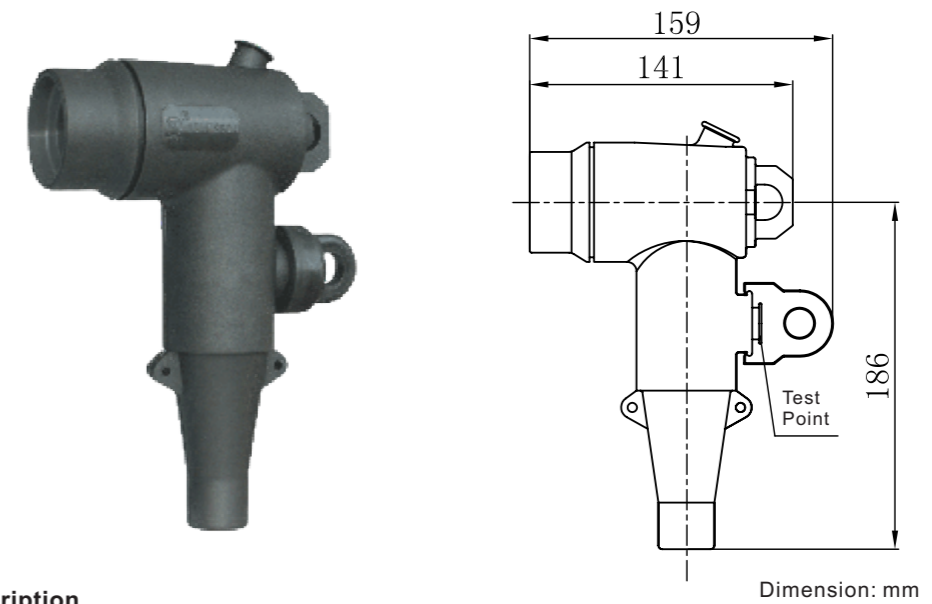
- Made of high quality epoxy resin
- Meeting requirements of EN 50180 & EN 50181 type A
- 100% factory tested
- Voltage class: 24 kV
- Tested in compliance with GB/T 4109 (IEC60137 6.0)

Technical Data

Voltage Class	24kV
Continuous Current	250A
Bushing Interface	EN 50181&50180 type A
AC Withstand Voltage	65kV for 1min
Partial Discharge	20kV, ≤10pC
Impulse Withstand Voltage (10 times for each polarity)	125kV
Overload Current (8 hrs Max)	300A

Note: The bushing interface is identical to the 200A deadbreak interface of IEEE 386 standard.

250A Deadbreak Elbow Connector (WEZT 15/250 or WEZT 24/250)



Description

- Made of high quality EPDM rubber, providing a fully screened and submersible separable connection
- Mating with bushings according to EN 50180 & EN 50181 type A
- Built-in capacitive test point to determine the circuit status or install a fault indicator
- 100% factory tested and compact design
- Voltage class: 15 kV, 24 kV
- Cable cross-section: 35-120 mm²
- Tested in compliance with IEC 60502.4

Technical Data

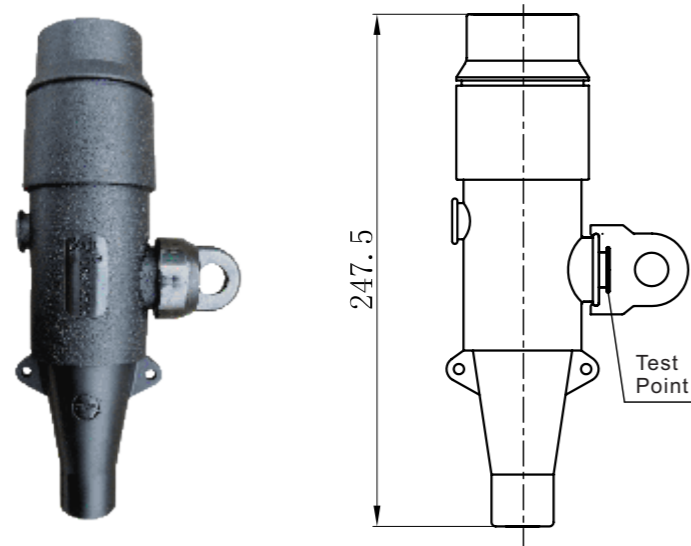
Voltage Class	15kV	24kV
Continuous Current	250A	250A
Appliance Bushing	EN 50181&50180 type A	EN 50181&50180 type A
AC Withstand Voltage	39kV for 5min	54kV for 5min
Partial Discharge	15kV, ≤10pC	20kV, ≤10pC
Impulse Withstand Voltage (10 times for each polarity)	95kV	125kV
Overload Current (8 hrs Max)	300A	300A
Screen Resistance	≤5000Ω	≤5000Ω

Ordering Information and Designation

WEZT	1	2	3	4	5
		/250			
1: Rated Voltage	2: Diameter over Insulation /mm	3: Cable Cross-section /mm²	4: Material of Lug	5: Kit	
15: 8.7/15kV 24: 12/20kV	A: Ø17-Ø22 B: Ø20-Ø25 C: Ø23-Ø28	02:35 03:50 04:70 05:95 06:120	C: Cu A: Al	3: 3pcs/kit 1: 1pc/kit	

For example: WEZT 15/250A02C3

250A Deadbreak Straight Connector (WEZC 15/250 or WEZC 24/250)



Dimension: mm

Description

- Made of high quality EPDM rubber, providing a fully screened and submersible separable connection
- Mating with A-type bushings as per EN 50180 & EN 50181
- Built-in capacitive test point allows for an easy check of the circuit status or installation of a fault indicator
- 100% factory tested, Compact design
- Voltage class: 15 kV, 24 kV
- Cable cross-section: 35-120 mm²
- Tested in compliance with IEC 60502.4

Technical Data

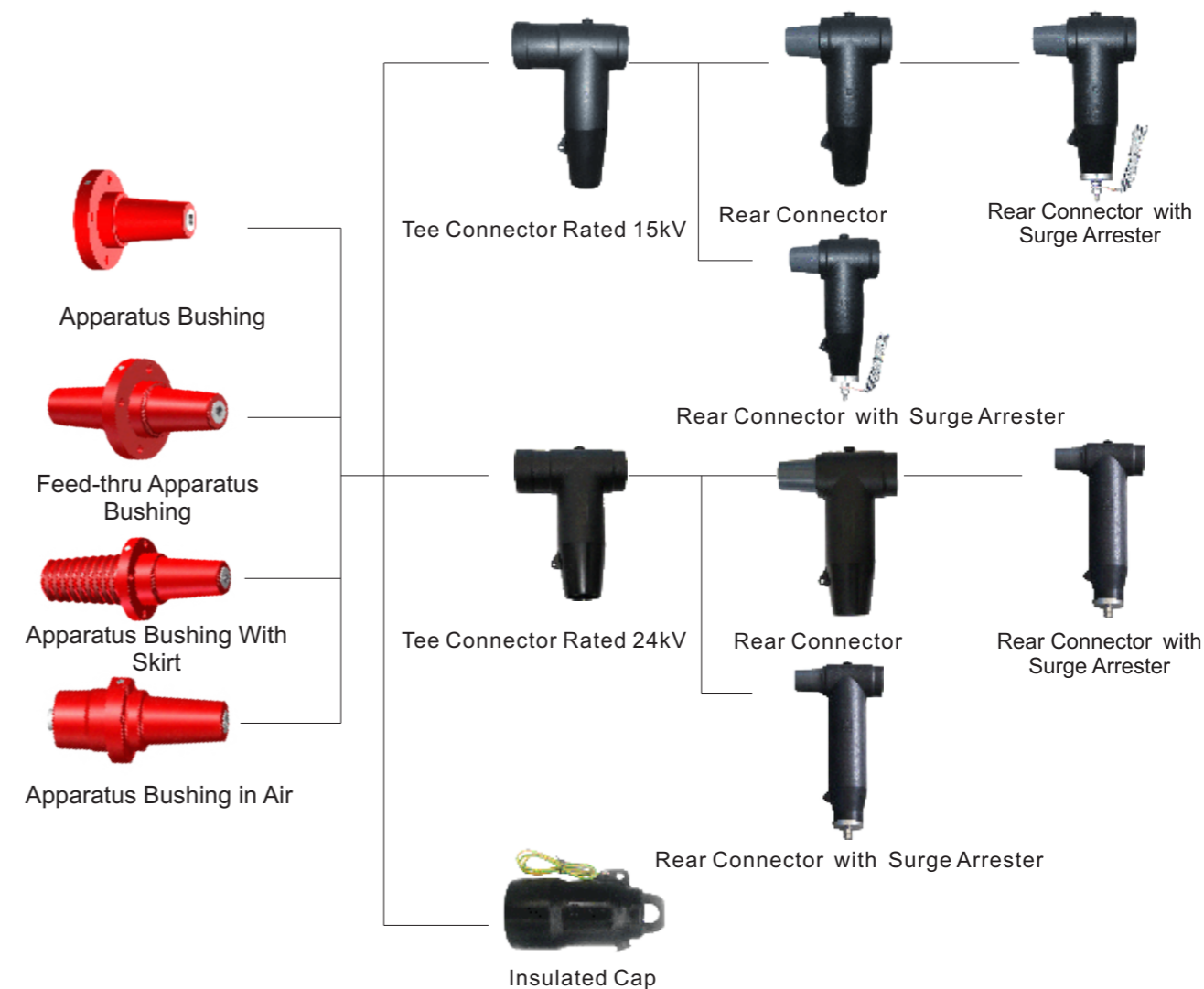
Voltage Class	15kV	24kV
Continuous Current	250A	250A
Appliance Bushing	EN 50181&50180 type A	EN 50181&50180 type A
AC Withstand Voltage	39kV for 5min	54kV for 5min
Partial Discharge	15kV, ≤10pC	20kV, ≤10pC
Impulse Withstand Voltage (10 times for each polarity)	95kV	125kV
Overload Current (8 hrs Max)	300A	300A
Screen Resistance	≤5000Ω	≤5000Ω
Cable Cross-section	35-120mm ²	35-120mm ²

Ordering Information and Designation

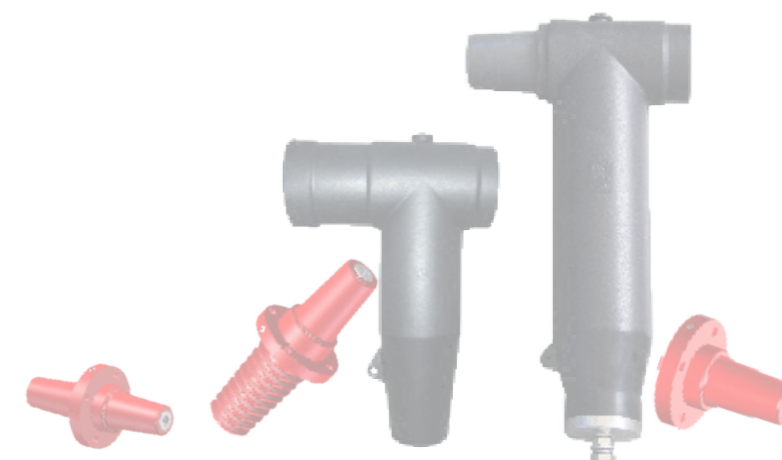
WEZC	1	2	3	4	5
WEZC	/250				
1: Rated Voltage	2: Diameter over Insulation /mm	3: Cable Cross-section /mm ²	4: Material of Lug	5: Kit	
15: 8.7/15kV 24: 12/20kV	A: Ø17-Ø22 B: Ø20-Ø25 C: Ø23-Ø28	02:35 03:50 04:70 05:95 06:120	C: Cu A: Al	3: 3pcs/kit 1: 1pc/kit	

For example: WEZC 15/250A04C3

630A Serial Deadbreak



Typical Components of 630A Deadbreak Separable Insulated Connector System



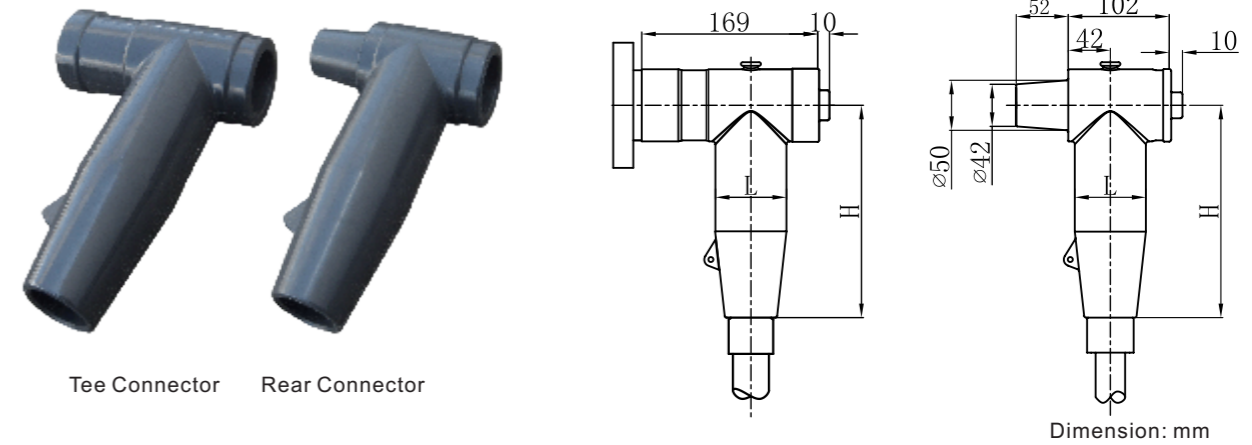
630A Deadbreak Tee Connector (WEB III 15/630 or WEBK III 15/630)

Ordering Information and Designation

Ordering Information and Designation					
1 2 3 4 5 6					
WE /630					
1: Characteristic	2: Rated Voltage	3: Diameter over Insulation /mm	4: Cable Cross-section /mm ²	5: Material of Lug	6: Kit
B III: Screened Tee Connector BK III: Screened Rear Connector	15: 8.7/15kV	A: Ø14-Ø16 B: Ø16-Ø18 C: Ø17-Ø20 D: Ø20-Ø23 E: Ø23-Ø26 F: Ø26-Ø30 G: Ø30-Ø33 H: Ø33-Ø36 I: Ø36-Ø39	01:25 02:35 03:50 04:70 05:95 06:120 07:150 08:185 09:240 10:300 11:400 12:500	C: Cu A: Al	3: 3pcs/kit 1: 1pc/kit
	24: 12/20kV	A: Ø18-Ø22 B: Ø22-Ø25 C: Ø25-Ø28 D: Ø28-Ø32 E: Ø32-Ø35 F: Ø35-Ø38 G: Ø38-Ø41	01:25 02:35 03:50 04:70 05:95 06:120 07:150 08:185 09:240 10:300 11:400	C: Cu A: Al	3: 3pcs/kit 1: 1pc/kit

For example: WEB III 15/630A02C3

630A Deadbreak Tee Connector (WE III 15/630 or WEK III 15/630)



Cable Cross-section	25~300 (mm ²)	400~500 (mm ²)
Outer Diameter L(mm)	71	79
Length H(mm)	242±5	272±5

Description

- Made of high quality EPDM rubber
- Mating with C-type bushings and plugs complying with EN 50180 & EN 50181
- Compact design
- 100% factory tested
- Voltage class: 15kV
- Tested in compliance with IEC 60502.4

Technical Data

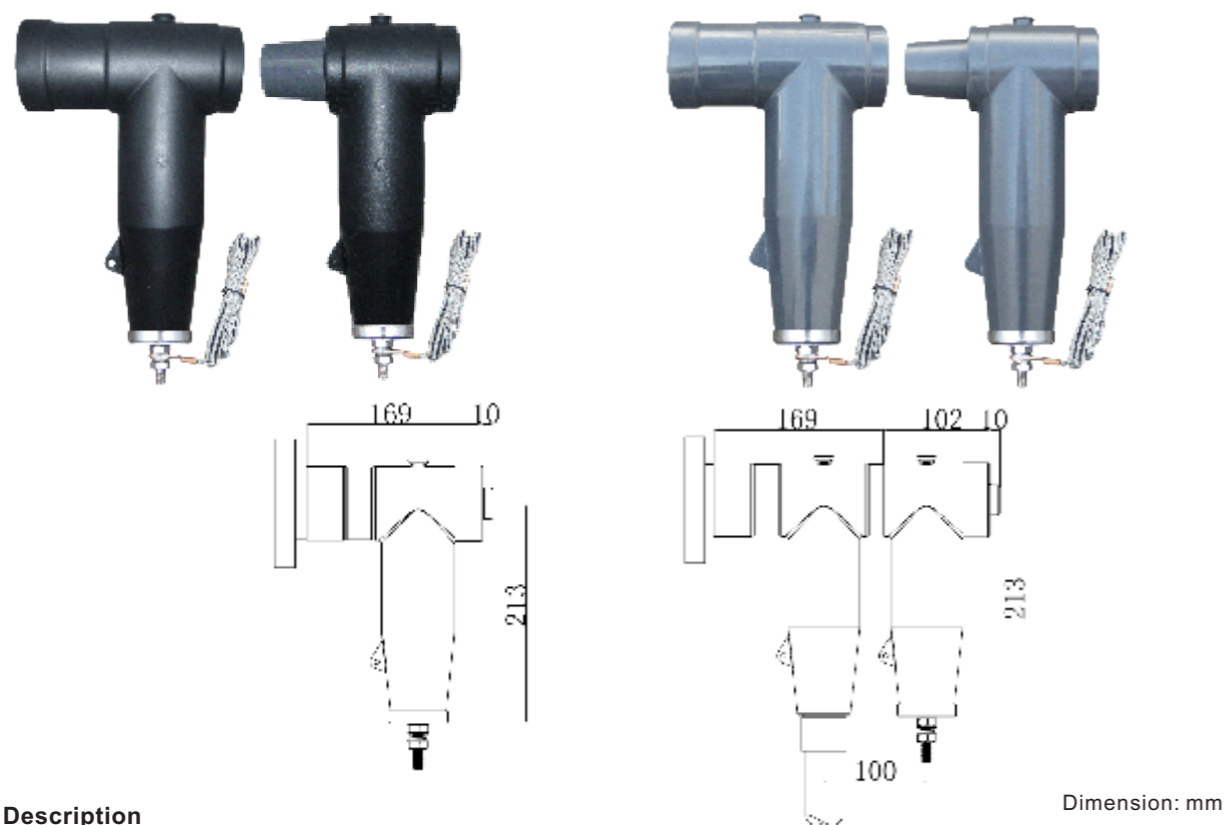
Voltage Class	15kV
Continuous Current	630A—1250A
Appliance Bushing	EN 50180 & 50181 Type C
AC Withstand Voltage	39kV for 5min
Partial Discharge at 1.73U ₀	≤10pC
Impulse Withstand Voltage (10 times for each polarity)	95kV
Cable Cross-section	25-500mm ²

Ordering Information and Designation

Ordering Information and Designation					
1 2 3 4 5 6					
WE /630					
1: Characteristic	2: Rated Voltage	3: Diameter over Insulation /mm	4: Cable Cross-section /mm ²	5: Material of Lug	6: Kit
III: Unscreened Tee Connector K III: Unscreened Rear Connector	15: 8.7/15kV	A: Ø14-Ø16 B: Ø16-Ø18 C: Ø17-Ø20 D: Ø20-Ø23 E: Ø23-Ø26 F: Ø26-Ø30 G: Ø30-Ø33 H: Ø33-Ø36 I: Ø36-Ø39	01:25 02:35 03:50 04:70 05:95 06:120 07:150 08:185 09:240 10:300 11:400 12:500	C: Cu A: Al	3: 3pcs/kit 1: 1pc/kit

For example: WE III 15/630B02C3

Surge Arrester (MOA Rated 15kV)



Dimension: mm

Description

- Fully insulated and 100% factory tested
- Protecting electrical components against over-voltage and transient
- The surge arrester's active part is made of metal oxide
- The connected braid manages short circuit currents
- Tested in compliance with IEC 60099.4-2006, JB/T 8952

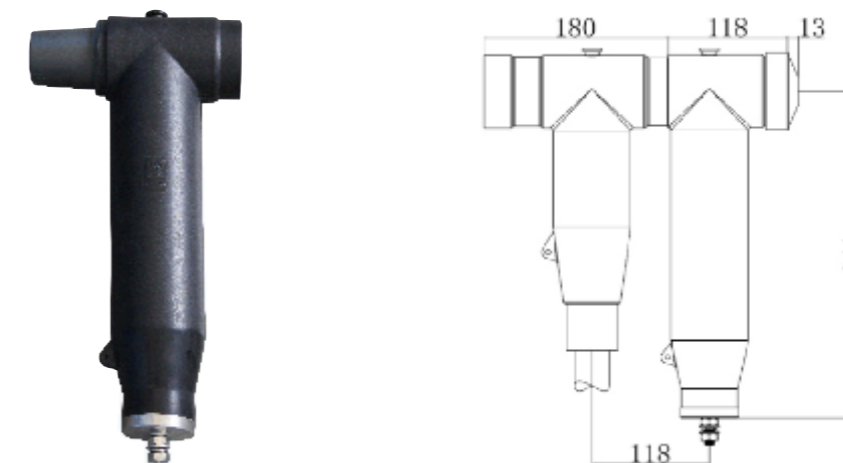
Technical Data

Item	YH5WZ-10/27	YH5WS-10/30	YH5WS-13/36	YH5WZ-17/45	YH5WS-17/50
System Nominal Voltage(kV)	6	6	10	15	15
Rated Voltage(kV)	10	10	13	17	17
Continuous Operation Voltage (kV)	8.0	8.0	10.4	13.6	13.6
Steep Current Impulse Residual Voltage (kV)	≤31.0	≤34.6	≤41.3	≤51.8	≤57.5
Lightning Impulse Residual Voltage(kV)	≤27.0	≤30.0	≤36.0	≤45.0	≤50.0
Switching Impulse Residual Voltage(kV)	≤23.0	≤25.6	≤30.7	≤35	≤42.5
Long Duration Current Impulse Withstand(A)	150	75	150	150	100
High Current Impulse Withstand (kA)	65	65	65	65	65

Selection Table

Item	Part No.
Screened	For Tee Connector WEB YH5WZ-10/27 WEB YH5WS-10/30 WEB YH5WS-13/36 WEB YH5WZ-17/45 WEB YH5WS-17/50
	For Rear Connector WEBK YH5WZ-10/27 WEBK YH5WS-10/30 WEBK YH5WS-13/36 WEBK YH5WZ-17/45 WEBK YH5WS-17/50
Unscreened	For Tee Connector WE YH5WZ-10/27 WE YH5WS-10/30 WE YH5WS-13/36 WE YH5WZ-17/45 WE YH5WS-17/50
	For Rear Connector WEK YH5WZ-10/27 WEK YH5WS-10/30 WEK YH5WS-13/36 WEK YH5WZ-17/45 WEK YH5WS-17/50

Surge Arrester (MOA Rated 20kV)



Dimension: mm

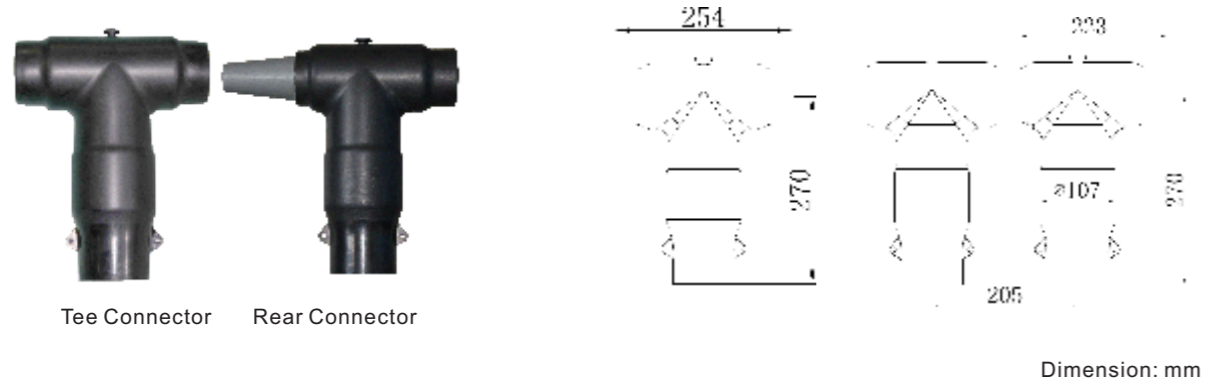
Description

- Fully screened and insulated
- Protecting electrical components against over-voltage and transients
- The surge arrester's active part is made of metal oxide
- The connected braid manages short circuit currents
- In compliance with IEC 60099.4-2006, JB/T 8952
- 100% factory tested

Technical Data

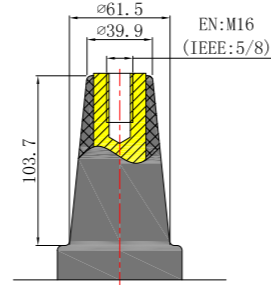
Item	WEBK YH5WZ-26/66	WEBK YH5WZ-32/85	WEBK YH5WX-34/90
System Nominal Voltage(kV)	20	20	20
Rated Voltage	26	32	34
Continuous Operation Voltage (kV)	20.8	25.6	27.2
Steep Current Impulse Residual Voltage (kV)	≤ 76	≤ 95	≤ 104
Lightning Impulse Residual Voltage(kV)	≤ 66	≤ 85	≤ 90
Switching Impulse Residual Voltage(kV)	≤ 56	≤ 75	≤ 80
Long Duration Current Impulse withstand(A)	150	150	150
High Current Impulse Withstand (kA)	65	65	65

630A Deadbreak Tee Connector Rated 35kV(WEB 35/630)



Description

- With patented cable adaptor (ZI201020709860)
- Made of high quality EPDM rubber, providing a fully screened and submersible separable connection
- Mates with both E-type bushings and plugs complying with EN 50180 & EN 50181 and IEEE 386 600A bushing rated 35kV (different bushing interface determines different package kit)
- Compact design
- 100% factory tested
- Tested in compliance with IEC 60502.4
- Cable cross-section: 50-400mm²



Bushing Interface: Type E

Technical Data

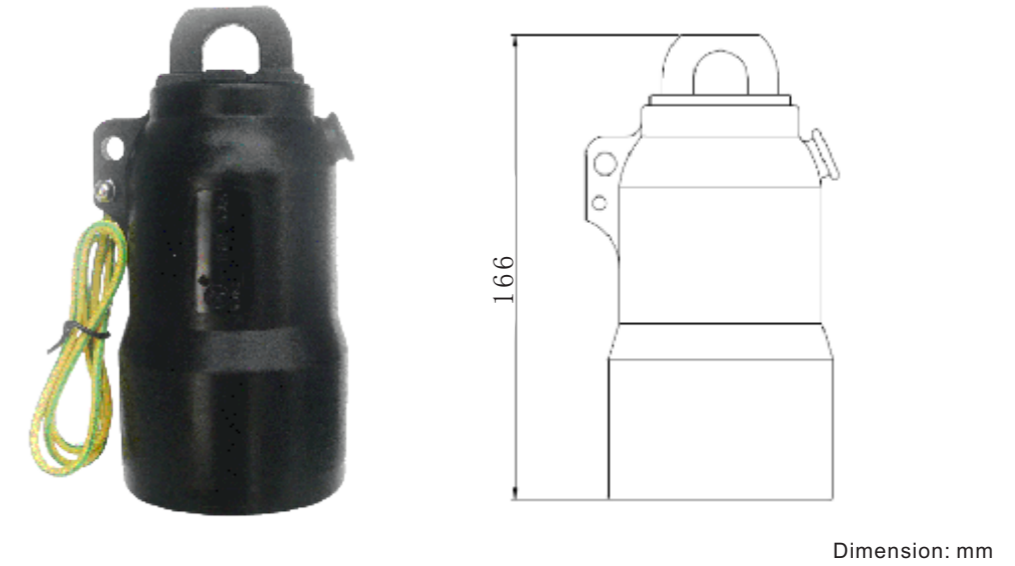
Voltage Class	35kV
Rated Current	630A
Appliance Bushing	EN 50181&50180 Type E IEEE 386 600A deadbreak rated 35kV
AC Withstand Voltage	117kV for 5min
Partial Discharge at 45kV	≤10pC
Impulse Withstand Voltage (10 times for each polarity)	200kV
Screen Resistance	≤5000
Cable Cross-section	50-400mm ²

Ordering Information and Designation

	1	2	3	4	5
WEB		/630			
1: Rated Voltage	35: 26/35kV	2: Diameter over Insulation /mm	3: Cable Cross-section /mm²	4: Material of Lug	5: Kit
		A: Ø30-Ø34 B: Ø33-Ø37 C: Ø36-Ø40 D: Ø40-Ø43 E: Ø42-Ø45 F: Ø45-Ø48	03:50 04:70 05:95 06:120 07:150 08:185 09:240 10:300 11:400	C: Cu A: Al	3: 3pcs/kit 1: 1pc/kit

For example: WEB 35/630C04C3

630A Deadbreak Insulated Cap(WJM 15/630 or WJM 24/630)



Description

- Made of high quality EPDM rubber
- Used to insulate, shield and seal the deadbreak interfaces of C-type bushings, complying with EN 50180 & EN 50181
- Tested in compliance with IEC 60502.4
- 100% factory tested

Technical Data

Item	WJM 15/630	WJM 24/630
Rated Voltage	15kV	24kV
Rated Current	630A	630A
AC Withstand Voltage	39kV for 5min	54kV for 5min
Partial Discharge	15kV, ≤10pC	20kV, ≤10pC
Impulse Withstand Voltage (10 times for each polarity)	95kV	125kV
Screen Resistance	≤5000Ω	≤5000Ω

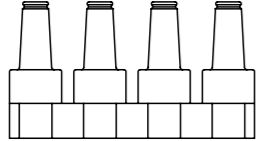
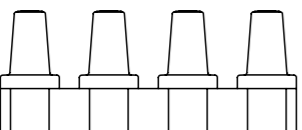
Separable Connectors Mated with IEEE 386

Woer produces a range of separable Elbow and Tee connector kits. Our separable connectors are widely used in switchgears, transformers, cabinets and other electrical equipments. It is made of EPDM or silicone rubber with integrated field control. Woer adopts advanced triple-layer (a conductive inner layer, an insulation layer and a conductive outer layer) injection technique to guarantee the interface property to avoid gaps between layers and decrease partial discharge maximally. Our separable connectors are mainly delivered in 3-phase kit. Each kit contains all the necessary accessories.

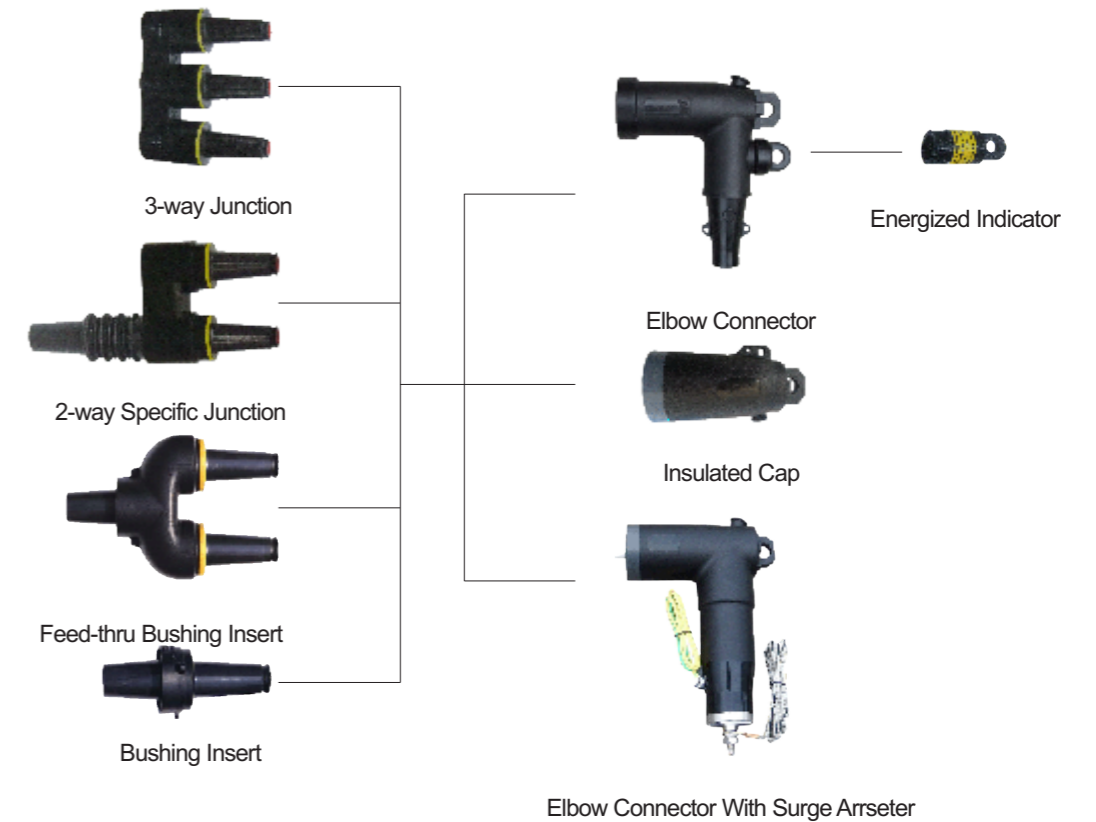
Woer products have been designed and tested per IEEE and other industry standard including:

Standard	Description
IEEE 386	Separable insulated connector system for power distribution system above 600V
GB 11032	Metal oxide surge arresters without gaps for a.c. systems
JB/T 8952	Polymer-housed metal oxide surge arresters without gaps for a.c. systems

Brief instruction for operation interface according to IEEE 386

Operation Interface	Rated Voltage	Interface Description	Standard
200A Series Loadbreak Bushing or Junction 	8.3/14.4kV	200A Sliding	IEEE 386 Loadbreak
600A Series Deadbreak Bushing or Junction 	15.2/26.3kV	600A Bolted	IEEE 386 Deadbreak

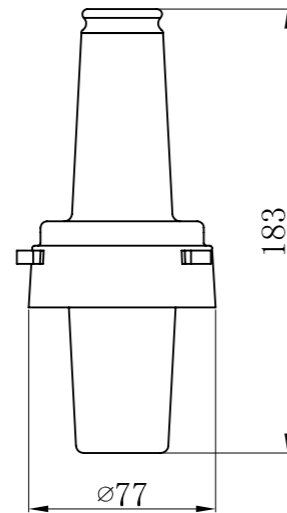
200A Serial Loadbreak



Typical components of 200A Loadbreak Separable Insulated Connector System



200A Loadbreak Bushing Insert(WADT 15/200)



Dimension: mm

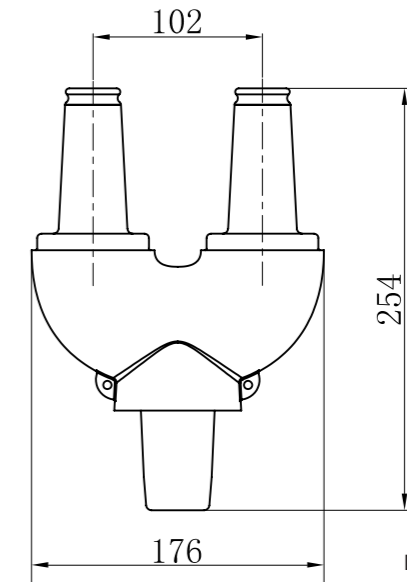
Description

- Providing a fully shielded and submersible connection for mated loadbreak operation
- Used with loadbreak connectors meeting the requirements of IEEE 386
- Compact design
- Made of high quality EPDM rubber

Technical Data

Item	Bushing Insert
Rated Voltage(U_0/U)	8.3/14.4kV
Rated Current	200A
AC Withstand Voltage	34kV for 1min
Partial Discharge	11kV, $\leq 3\text{pC}$
Impulse Withstand Voltage (10 times for each polarity)	95kV
Switching Current	14.4kV, 200A, 10times
Screen Resistance	$\leq 5000\Omega$

200A Loadbreak Feed-thru Bushing Insert(WAST 15/200)



Dimension: mm

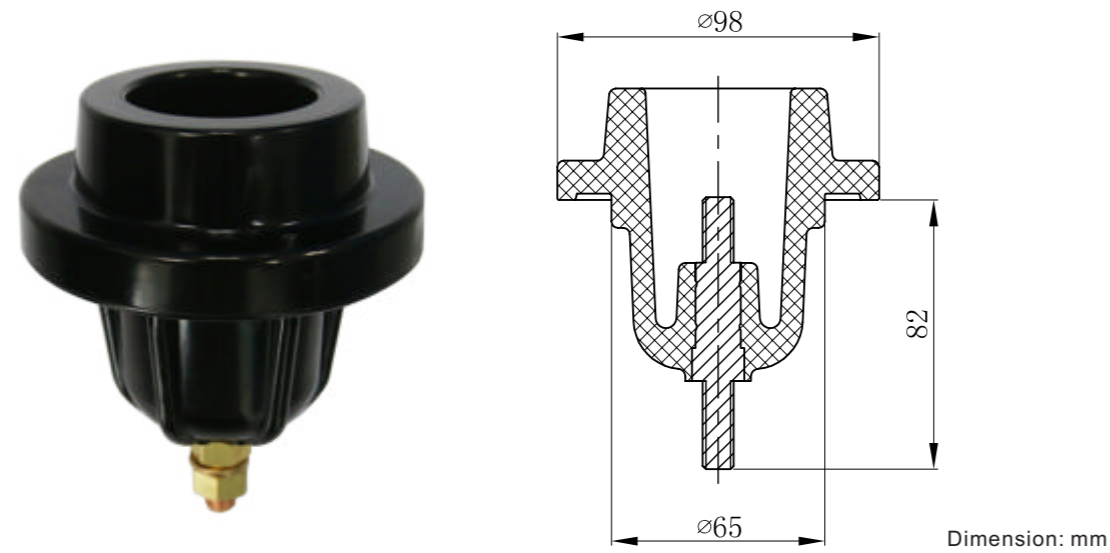
Description

- Providing two electrically interconnected bushing interface
- Providing a fully shielded and submersible connection for mated loadbreak operation
- Used with loadbreak connectors meeting the requirements of IEEE 386
- Compact design
- Made of high quality EPDM rubber

Technical Data

Item	Feed-thru Bushing Insert
Rated Voltage(U_0/U)	8.3/14.4kV
Rated Current	200A
AC Withstand Voltage	34kV for 1min
Partial Discharge	11kV, $\leq 3\text{pC}$
Impulse Withstand Voltage (10 times for each polarity)	95kV
Switching Current	14.4kV, 200A, 10times
Screen Resistance	$\leq 5000\Omega$

200A Loadbreak Bushing Well(WATGZ 15/200)



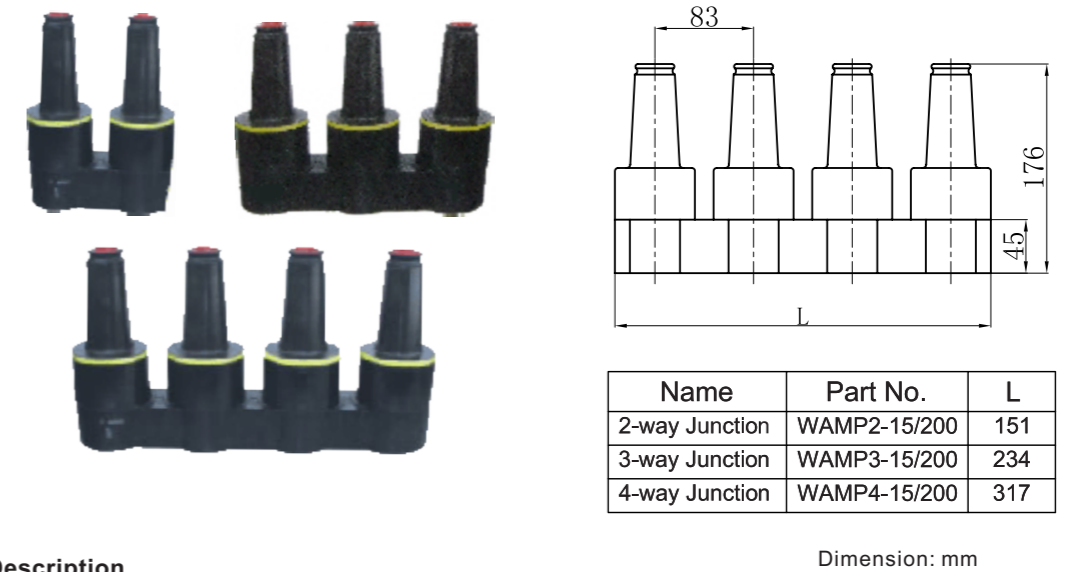
Description

- Providing a fully shielded and submersible connection for loadbreak connector component, such as bushing insert
- Used with loadbreak connectors meeting the requirements of IEEE 386
- Compact design
- Made of high quality epoxy resin

Technical Data

Item	Bushing Well
Rated Voltage(U ₀ /U)	8.3/14.4kV
Rated Current	200A
AC Withstand Voltage	34kV for 1min
Partial Discharge	11kV, ≤3pC
Impulse Withstand Voltage (10 times for each polarity)	95kV

200A Loadbreak Junction



Name	Part No.	L
2-way Junction	WAMP2-15/200	151
3-way Junction	WAMP3-15/200	234
4-way Junction	WAMP4-15/200	317

Description

- Providing a fully shielded and submersible connection for mated loadbreak operation
- Using with loadbreak connectors meeting the requirements of IEEE 386
- Optional number of interface
- Made of high quality EPDM rubber

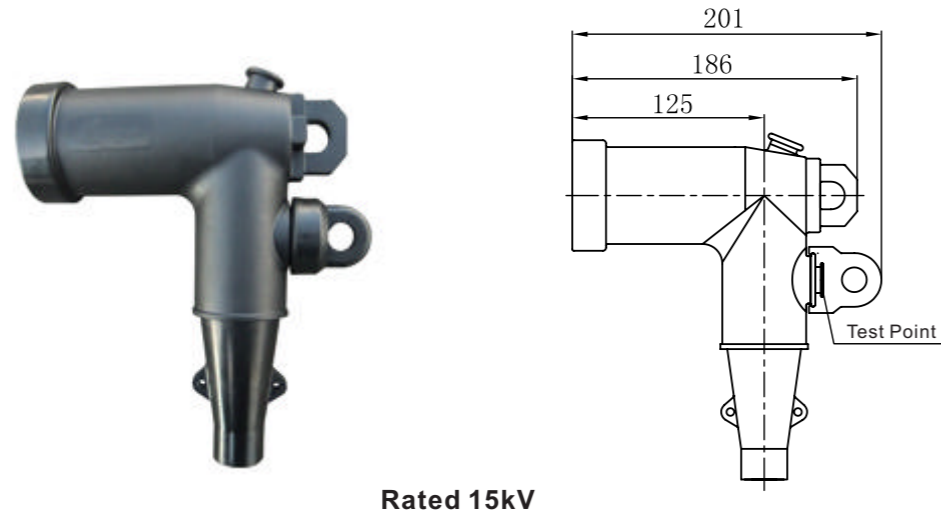
Technical Data

Item	Result
Rated Voltage(U ₀ /U)	8.3/14.4kV
Rated Current	200A
AC Withstand Voltage	34kV for 1min
Partial Discharge	11kV, ≤3pC
Impulse Withstand Voltage (10 times for each polarity)	95kV

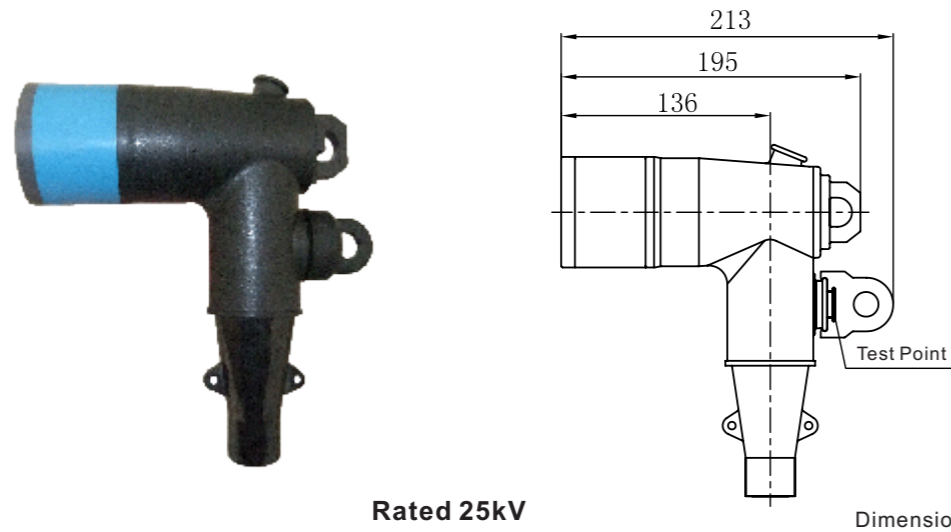
Selection Table

Name	Profile	Part No.	Interface
2-way Junction		WAMP2-15/200	Loadbreak Sliding
3-way Junction		WAMP3-15/200	Loadbreak Sliding
4-way Junction		WAMP4-15/200	Loadbreak Sliding
2-way Specific Junction		WAYMP2-15/200	Loadbreak Sliding

200A Loadbreak Elbow Connector(WAZT 15/200 or WAZT 25/200)



Rated 15kV



Rated 25kV

Dimension: mm

200A Loadbreak Elbow Connector(WAZT 15/200 or WAZT 25/200)

Ordering Information and Designation

WAZT	1	2	3	4	5
		/200			
1: Rated Voltage	2: Diameter over Insulation /mm	3: Cable Cross-section /mm ²	4: Material of Lug	5: Kit	
15: 8.3/14.4kV	A: Ø17-Ø20 B: Ø20-Ø23 C: Ø23-Ø26	02: 35 03: 50 04: 70 05: 95 06: 120	C: Cu A: Al	3: 3pcs/kit 1: 1pc/kit	
25: 15.2/26.3kV	A: Ø16-Ø21 B: Ø18-Ø24 C: Ø22-Ø28 D: Ø25-Ø32	01: 25 02: 35 03: 50 04: 70 05: 95 06: 120	C: Cu A: Al	3: 3pcs/kit 1: 1pc/kit	

For example: WAZT 15/200B04C3

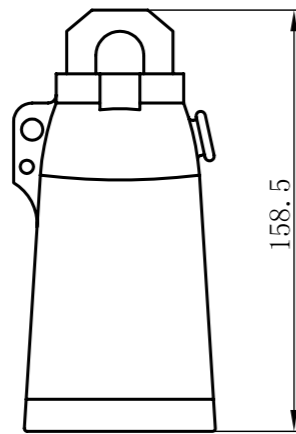
Description

- Made of high quality EPDM rubber
- Fully screened and submersible
- Built-in capacitive test point
- 100% factory tested
- Voltage class: 15kV, 25 kV
- In compliance with IEEE 386

Technical Data

Rated Voltage (U ₀ /U)	8.3/14.4kV	15.2/26.3kV
Rated Current	200A	200A
AC Withstand Voltage	34kV for 1min	40kV for 1min
Partial Discharge	11kV, ≤3pC	19kV, ≤3pC
Impulse Withstand Voltage (10 times for each polarity)	95kV	125kV
Switching Current	14.4kV, 200A, 10 times	26.3kV, 200A, 10 times
Screen Resistance	≤5000Ω	≤5000Ω
Cable Cross-section	35-120mm ²	25-120mm ²

200A Loadbreak Insulated Cap(WAJM 15/200)



Dimension: mm

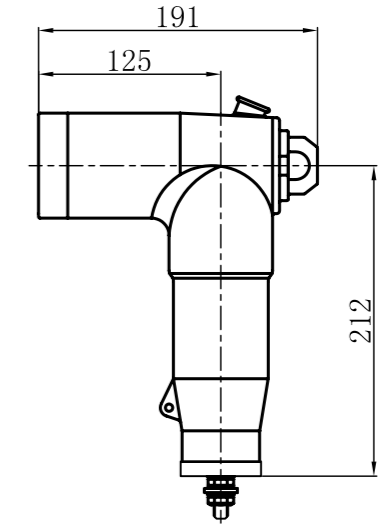
Description

- Made of high quality EPDM rubber
- Used to insulate, shield and seal the loadbreak interface of 200A bushings
- In compliance with IEEE 386
- 100% factory tested

Technical Data

Item	WAJM 15/200
Rated Voltage (U ₀ /U)	8.3/14.4kV
Rated Current	200A
AC Withstand Voltage	34kV for 1min
Partial Discharge	11kV, ≤3pC
Impulse Withstand Voltage (10 times for each polarity)	95kV
Screen Resistance	≤5000Ω

200A Loadbreak Elbow Connector with Surge Arrester



Dimension: mm

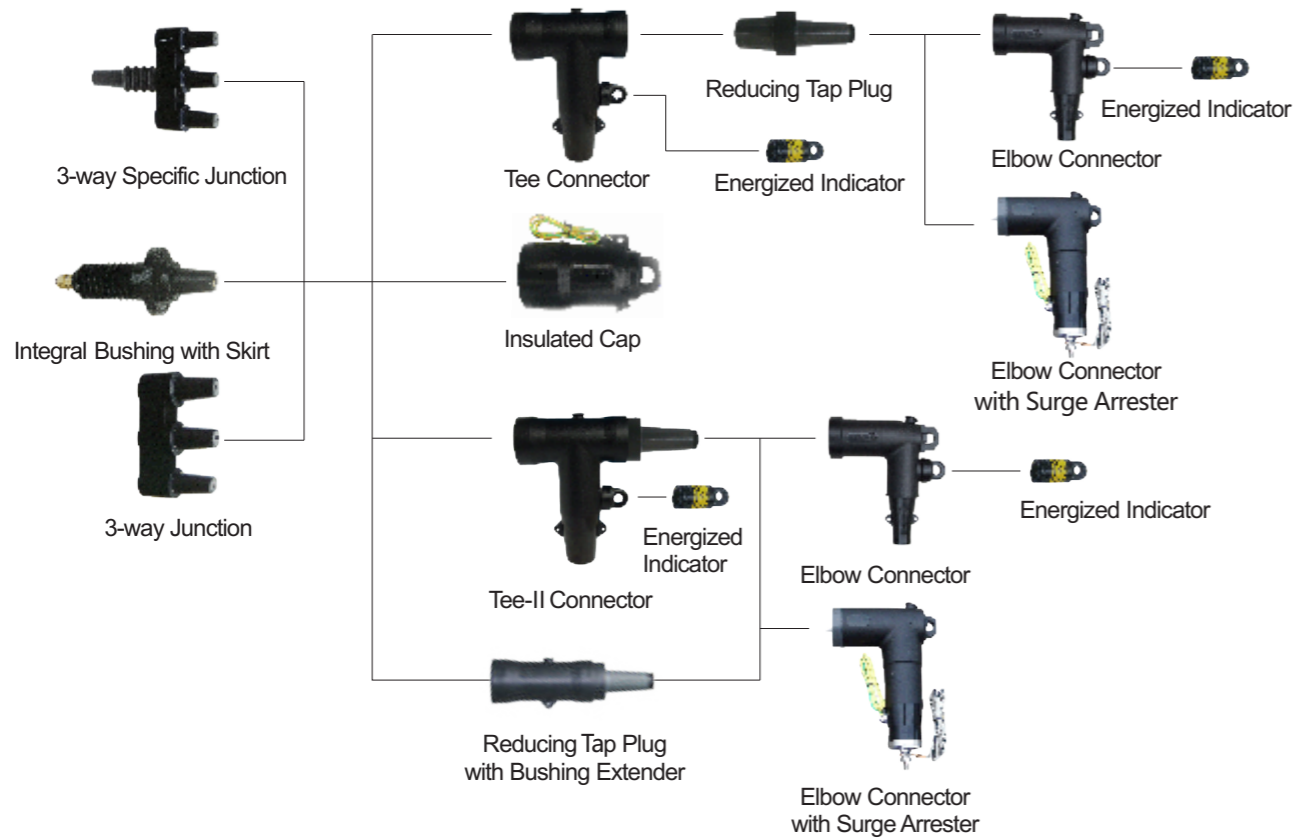
Description

- Fully screened and insulated
- Protecting electrical components against over-voltage and transients
- The surge arrester's active part is made of metal oxide
- The connected braid to manage short circuit currents
- In compliance with IEC 60099.4-2006, JB/T 8952
- 100% factory tested
- Made of high quality EPDM rubber

Technical Data

Item	WAZT-BLQ-17/45	WAZT-BLQ-17/50
System Nominal Voltage(kV)	15	15
Rated Voltage	17	17
Continuous Operation Voltage (kV)	13.6	13.6
Steep Current Impulse Residual Voltage (kV)	≤51.8	≤57.5
Lightning Impulse Residual Voltage(kV)	≤45	≤50
Switching Impulse Residual Voltage(kV)	≤35	≤42.5
Long Duration Current Impulse Withstand(A)	150	100
High Current Impulse Withstand (kA)	65	65

600A Serial Deadbreak



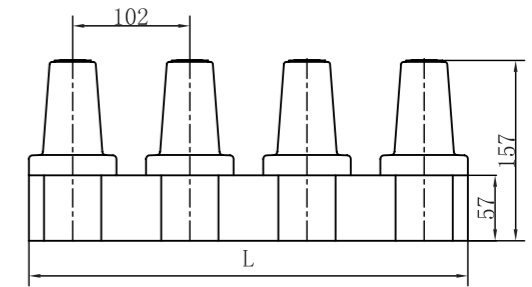
Typical Components of 600A Deadbreak Separable Insulated Connector System



600A Deadbreak Junction and Integral Bushing

Description

- Providing a fully shielded, submersible, threaded connection for mated deadbreak operation
- Using with deadbreak connectors meeting the requirements of IEEE 386
- Compact design
- In compliance with IEEE 386
- Made of high quality EPDM



Name	Part No.	L
2-way Junction	WAMP2-15/600	178
3-way Junction	WAMP3-15/600	280
4-way Junction	WAMP4-15/600	382

Dimension: mm

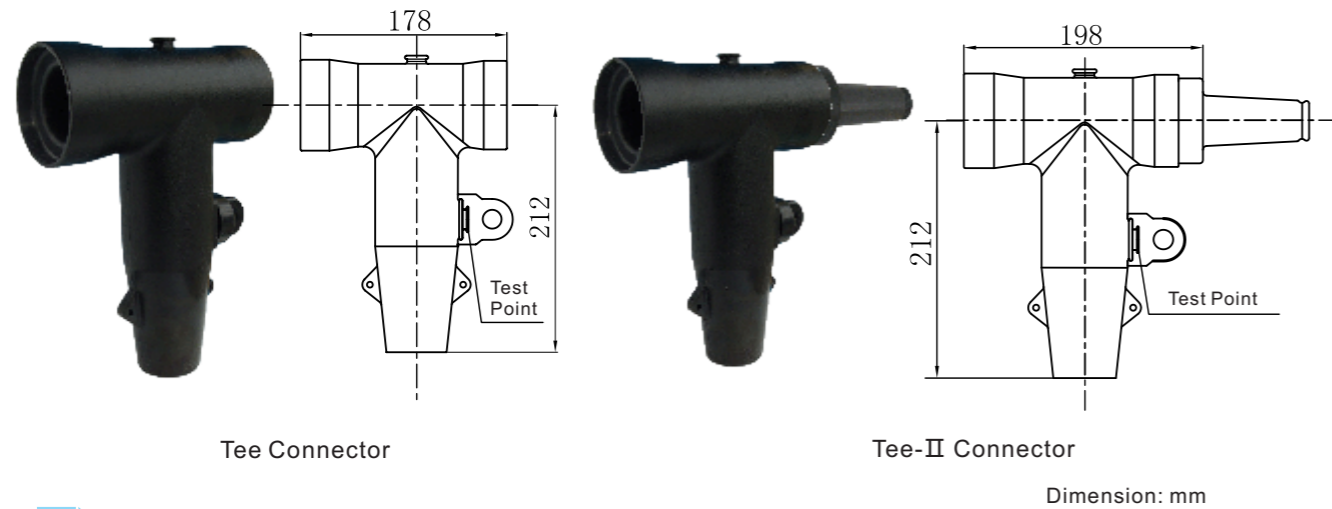
Technical Data

Item	Result
Rated Voltage(U_0/U)	8.3/14.4kV
Rated Current	600A
AC Withstand Voltage	34kV for 1min
Partial Discharge	11kV, $\leq 3pC$
Impulse Withstand Voltage (10 times for each polarity)	95kV

Selection Table

Name	Profile	Part No.	Interface
2-way Junction		WAMP2-15/600	Deadbreak Bolted
3-way Junction		WAMP3-15/600	Deadbreak Bolted
4-way Junction		WAMP4-15/600	Deadbreak Bolted
Integral Bushing with Skirt		WAYTSG-15/600	Deadbreak Bolted
3-way Specific Junction		WAYMP3-15/600	Deadbreak Bolted

600A Deadbreak Tee Connector(WABT 15/600 or WABT2 15/600)



Description

- Made of high quality EPDM rubber, providing a fully screened and submersible separable connection
- In complying with IEEE 386
- Compact design
- 100% factory tested
- Voltage class: 15 kV

Technical Data

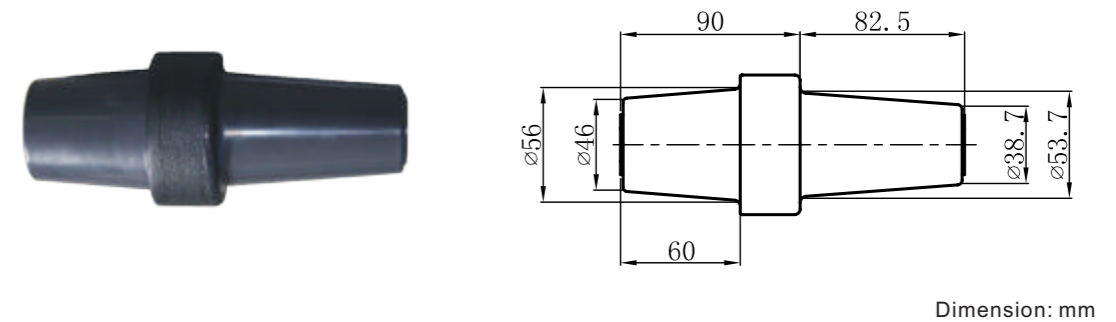
Item	Result
Rated Voltage (U ₀ /U)	8.3/14.4kV
Rated Current	600A
AC Withstand Voltage	34kV for 1min
Partial Discharge	11kV, ≤3pC
Impulse Withstand Voltage (10 times for each polarity)	95kV
Screen Resistance	≤5000Ω
Cable Cross-section	25-400mm ²

Ordering Information and Designation

WA	1	2	3	4	5	6
WA		/600				
1: Characteristic	2: Rated Voltage	3: Diameter over Insulation /mm	4: Cable Cross-section /mm ²		5: Material of Lug	6: Kit
BT: Tee BT2: Tee-II	15: 8.3/14.4kV	A:Ø14-Ø16 B:Ø16-Ø18 C:Ø17-Ø20 D:Ø20-Ø23 E:Ø23-Ø26 F:Ø26-Ø30 G:Ø30-Ø33 H:Ø33-Ø36	01:25 03:50 05:95 07:150 09:240 11:400	02:35 04:70 06:120 08:185 10:300	C: Cu A: Al	3: 3pcs/kit 1: 1pc/kit

For example: WABT2 15/600B05C3

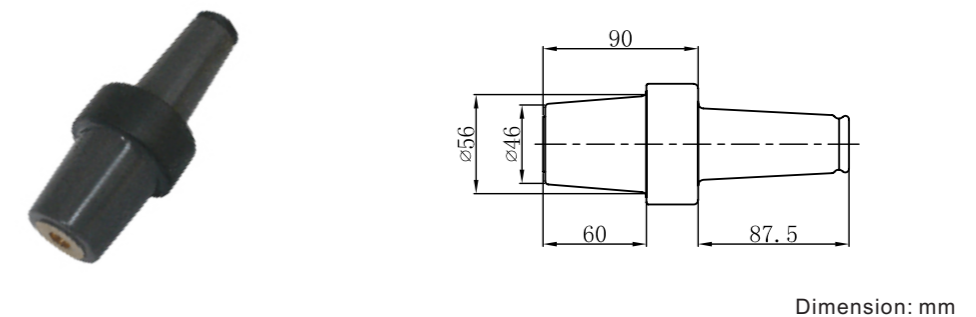
600A Deadbreak Connecting Plug(WAZH 15/600/600)



Description

- Providing a fully shielded, submersible, threaded connection for mated deadbreak operation
- Using with deadbreak connectors meeting the requirements of IEEE 386
- Compact design and made of high quality EPDM rubber
- Providing two in-line bushing interface
- In compliance with IEEE 386

600A Deadbreak Reducing Tap Plug(WAZH 15/600/200)



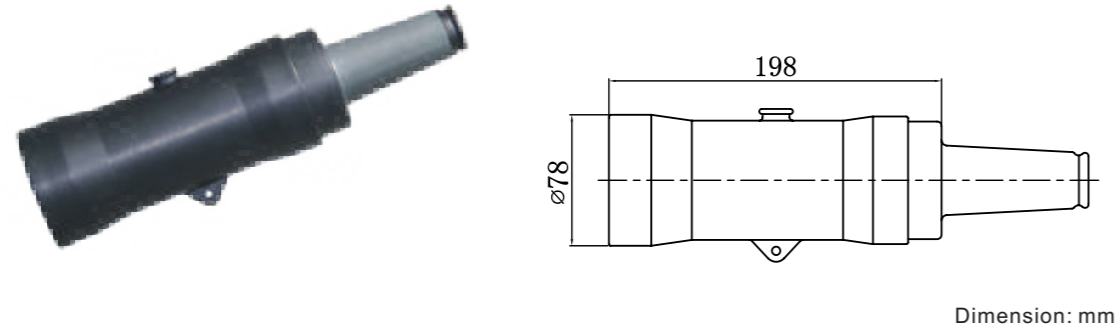
Description

- Providing a fully shielded, submersible, threaded connection for mated deadbreak operation
- Using with deadbreak connectors meeting the requirements of IEEE 386
- Compact design made of high quality EPDM rubber
- Transition of a 600A deadbreak system to a 200A loadbreak system
- In compliance with IEEE 386

Technical Data

Item	WAZH-15/600/600 or WAZH-15/600/200
Rated Voltage	8.3/14.4kV
Rated Current	600A
AC Withstand Voltage	34kV for 1min
Partial Discharge	11kV, ≤3pC
Impulse Withstand Voltage (10 times for each polarity)	95kV
Screen Resistance	≤5000Ω

600A Deadbreak Reducing Tap Plug with Bushing Extender (WAFZH 15/600/200)



Dimension: mm

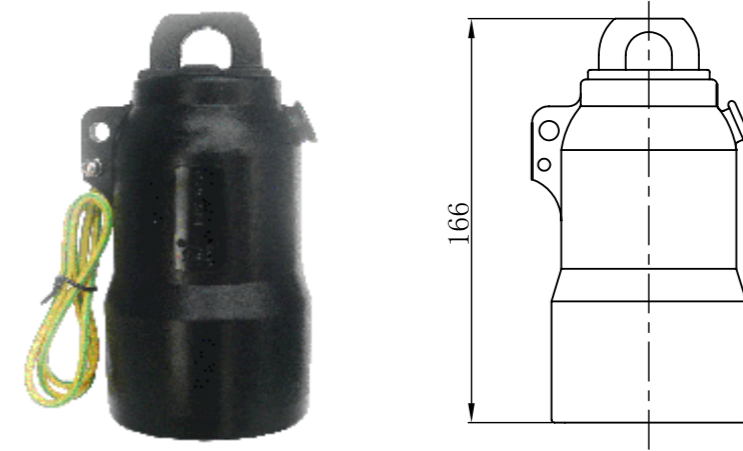
Extender

- Providing a fully shielded, submersible, threaded connection for mated deadbreak operation
- Using with deadbreak components meeting the requirements of IEEE 386
- Compact design
- Transition of a 600A deadbreak system to a 200A loadbreak system, with the 600A interface connecting to a bushing or a junction
- Made of high quality EPDM rubber

Technical Data

Item	WAFZH 15/600/200
Rated Voltage	8.3/14.4kV
Rated Current	600A/200A
AC Withstand Voltage	34kV for 1min
Partial Discharge	11kV, ≤3pC
Impulse Withstand Voltage (10 times for each polarity)	95kV
Screen Resistance	≤5000Ω

600A Deadbreak Insulated Cap(WAJM 15/600)



Dimension: mm

Description

- Made of high quality EPDM rubber
- Used to insulate, shield and seal the deadbreak interfaces of 600A bushings per IEEE 386
- Compact design
- Tested in compliance with IEEE 386
- 100% factory tested

Technical Data

Item	WAJM 15/600
Rated Voltage	8.3/14.4kV
Rated Current	600A
AC Withstand Voltage	34kV for 1min
Partial Discharge	11kV, ≤3pC
Impulse Withstand Voltage (10 times for each polarity)	95kV
Screen Resistance	≤5000Ω

Accessories

Energized Indicator(WDDX)



Install at the test point to indicate the circuit energized status with flicker warning the energized circuit. Moreover, it is fully insulated and sealed with unlimited climate condition.

Fault Indicator(EKL2)



Indicate the circuit status with flicker warning the fault circuit to shorten the fault inspecting time.

Cable Sheath Voltage Limiter (WBHQ 7/400 or WBHQ 7/600)



Use for single-core power cable route to restrict the inducted voltage on the cable metal sheath. It protects the sheath from breakdown by overvoltage.

Cold Shrink Sealing Kits for Connectors



3-core



1-core

Heat Shrink Sealing Kits for Connectors



3-core

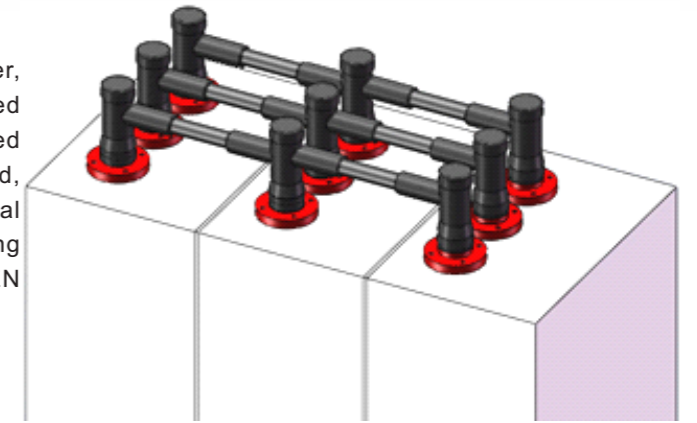


1-core

Busbar Connecting System

Busbar Connector

Busbar connector system is made of silicone rubber, mainly applied for the connection for SF6 insulated switchgear with metal housing. Such special designed connector can be also made screened or unscreened, which can electrically insulate and mechanically seal the connecting busbar and switchgear. The connecting interface conforms to type C according to EN50180, EN 50181 and DIN 47636.



Following are our unscreened products. Screened products are available according to different requirements.



End-adapter with Busbar
Part No. ZDMX 10/630-L

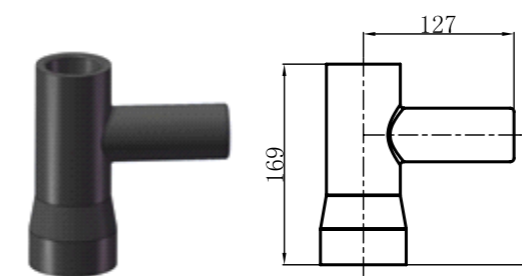


Cross-adapter with Busbar
Part No. ZJMX 10/630-L

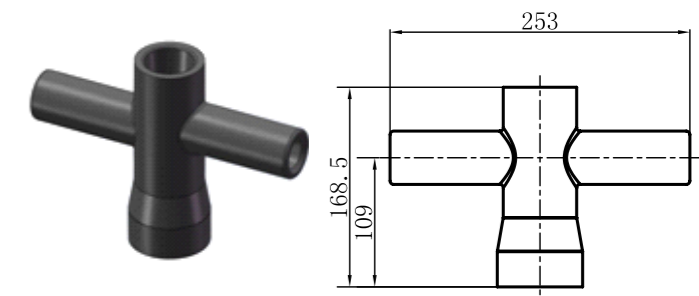
L: busbar length



Busbar



End-adapter



Cross-adapter

Dimension: mm

Inner Cone Busbar Kits

Inner cone busbar kits are suitable for the combined connection of ring main units to supply more branches for expansion. Meanwhile, it is a prior option to combined ring main units.



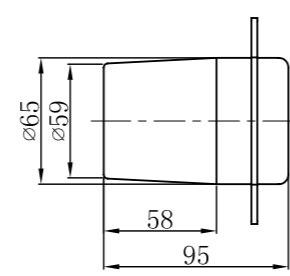
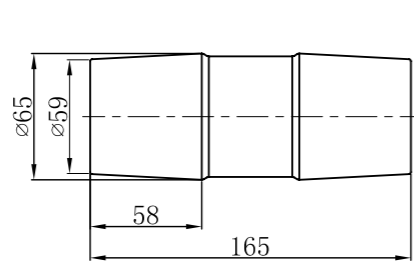
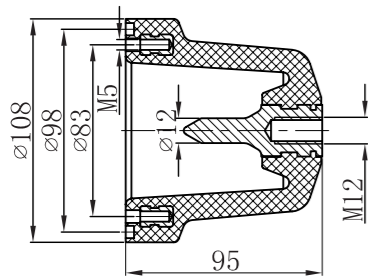
Inner Cone Busbar Insulator 1#
Part No. WNML1-TG



Inner Cone Busbar Connector 1#
Part No. WNML1-15



Inner Cone Busbar Plug 1#
Part No. WNMLD1-15



Dimension: mm

Technical Data

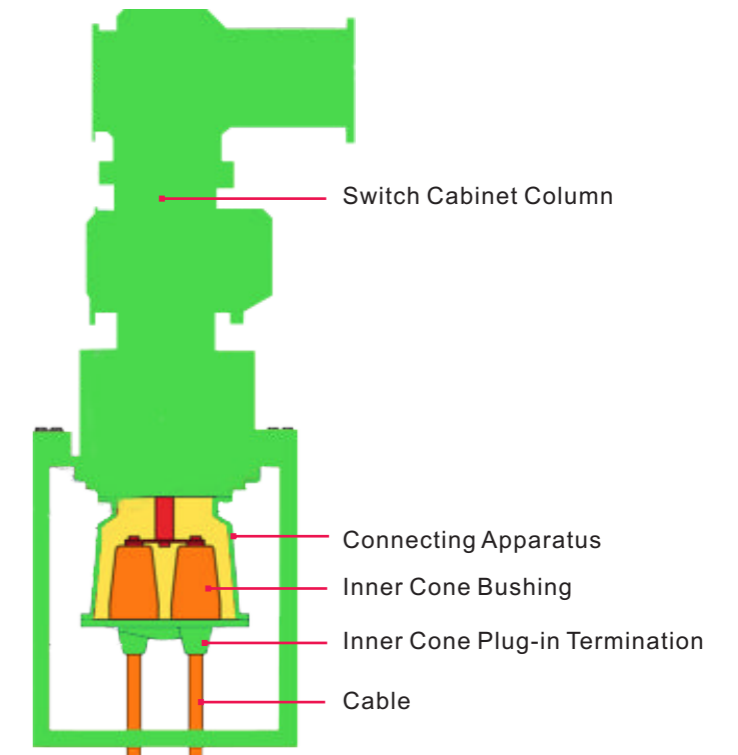
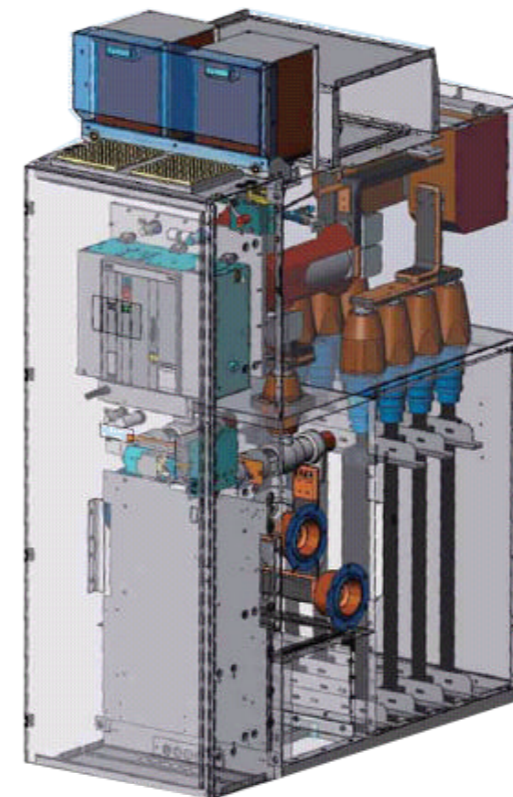
Item	Busbar Connector and Kits
Voltage Class	15kV
Rated Current	630A
Appliance Bushing	EN 50181&50180 type C
AC Withstand Voltage	42kV for 1min
Partial Discharge	15kV, ≤10pC
Impulse Withstand Voltage (10 times for each polarity)	75kV

Inner Cone Plug-in Serial up to 42kV

Termination

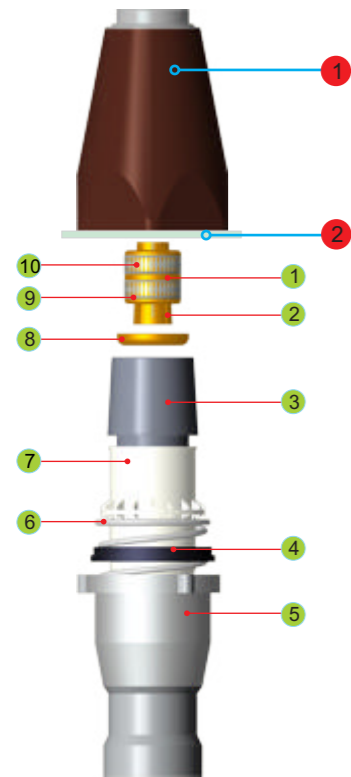


- Conforming to EN 50181&50180
- Dry interface
- Premould stress control cone of silicone rubber with 100% factory tested
- Tested according to IEC 60502
- Metal protective shell on tail to provide great mechanical protection and fully shield
- Adopting one-piece compression structure of tail tube and spring to ensure enough interface force between the stress control cone and bushing
- Suitable for indoor& outdoor condition mated with C-GIS or transformers



Application

Designed Profile



Insulated Bushing

- ① Inner Cone Insulated Bushing
- ② Flange

Inner Cone Plug-in Termination

- ① Wedge-shaped Cylinder
- ② Bite-wire Tool
- ③ Premould Stress Cone
- ④ Gasket
- ⑤ Tail Tube
- ⑥ Non-magnetic Spring
- ⑦ Supporting Tube
- ⑧ Stopper Set
- ⑨ Clamp Ring
- ⑩ Conductive Strip

Selection Table

Rated Voltage	Main Body	Core Number	Part No.
26/35kV	3#	1 or 3	35kV WCBN-3-1(3)×50~500
		1	35kV WCBN-3-1×630
27.5/42kV	2#	1 or 3	35kV WCBN-2-1(3)×50~120
		3#	27.5kV WCBN-3-1×50~500
18/30kV	3#	1 or 3	30kV WCBN-3-1(3)×35~500
		1	30kV WCBN-3-1×630~800
	2#	1 or 3	30kV WCBN-2-1(3)×70~240
12/20kV	1#	1 or 3	30kV WCBN-1-1(3)×35~240
		3#	20kV WCBN-3-1(3)×35~500
	2#	1	20kV WCBN-3-1×630~800
6/10, 8.7/10 or 8.7/15kV	3#	1 or 3	20kV WCBN-2-1(3)×150~400
		1	20kV WCBN-1-1(3)×35~400
	2#	1 or 3	10kV WCBN-3-1(3)×35~500
1#	1 or 3	1	10kV WCBN-3-1×630~1000
		1 or 3	10kV WCBN-2-1(3)×240~500
1#	1 or 3	10kV WCBN-1-1(3)×25~400	

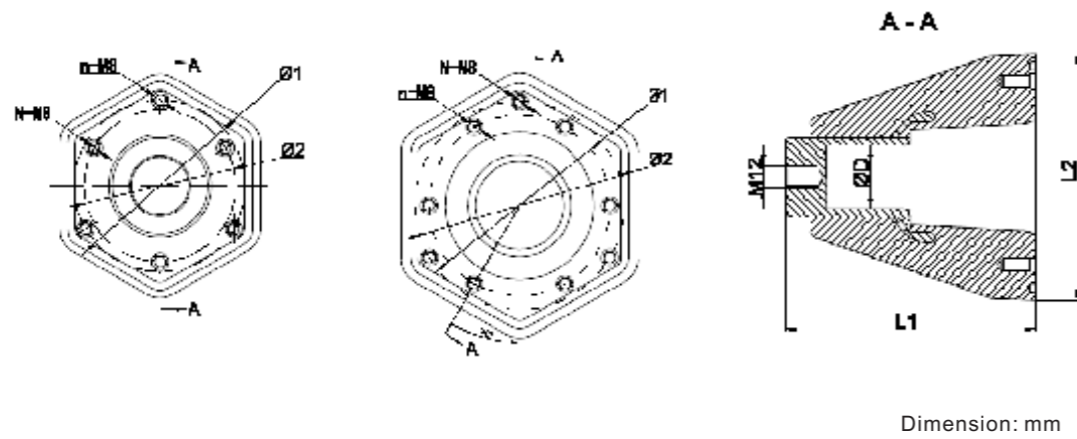
Technical Data

Item		Main Body		
		1#	2#	3#
Rated Current	A	630	800	1250
Maximum System Voltage(U_m)	kV	36	42	42
AC Withstand Voltage	50Hz for 5min (kV)	70	117	117
Partial Discharge	$1.73U_0$	$\leq 5pC$	$\leq 5pC$	$\leq 5pC$
Impulse Withstand Voltage (10 times for each polarity)	1.2/50 μs (kV)	170	200	200
Installation	1sec(kA)	31.5	40	50

Insulated Bushing

Description

- Conforming to EN 50181&50180
- Connecting to high voltage conductor of C-GIS cabinets or transformers
- Compact design, fully insulated and no maintenance



Referred Dimension

Item	Part No.	Part No.		
		WNJT-1	WNJT-2	WNJT-3
Outline	L1(mm)	140	140	217
	L2(mm)	136	136	165
Conductor	ΦD(mm)	36	39	55
Installation	Installation Position for Bushing Φ1(mm)	108	108	113
	Number of Installation Hole n(pcs)	3	3	6
	Installation Position for Termination Φ2(mm)	95	102	130
	Number of Installation Hole N(pcs)	3	3	3

Technical Data

Item	Part No.	Part No.		
		WNJT-1	WNJT-2	WNJT-3
Rated Current	A	630	800	1250
Maximum System Voltage(U _m)	kV	36	42	42
AC Withstand Voltage	50Hz for 5min (kV)	70	117	117
Partial Discharge	1.73U ₀	≤5pC	≤5pC	≤5pC
Impulse Withstand Voltage (10 times for each polarity)	1.2/50μs(kV)	170	200	200
Maximum Short-time Current Withstand	1sec(kA)	31.5	40	50
Rated Impulse Current	kA	125	150	150

Insulated Insert

Description

- Conforming to EN 50181 & 50180
- To seal and insulate inner cone insulated bushing used for spare outlet port



Technical Data

Item	Part No.	Part No.		
		WMT-1	WMT-2	WMT-3
Maximum System Voltage(U _m)	kV	36	42	42
AC Withstand Voltage	50Hz for 5min(kV)	70	117	117
Partial Discharge	1.73U ₀	≤5pC	≤5pC	≤5pC
Impulse Withstand Voltage (10 times for each polarity)	1.2/50μs(kV)	170	200	200

Test Report

电力工业电气设备质量检验测试中心

Quality Inspection and Test Center
for Equipment of Electric Power



(2012) 检字 JDL265 号

检测报告

Inspection Report



地址: 湖北省武汉市洪山区珞喻路 143 号
邮编: 430074
电话: 4006565689
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电力工业电气设备质量检验测试中心 QUALITY INSPECTION AND TEST CENTER FOR EQUIPMENT OF ELECTRIC POWER 检测报告 INSPECTION REPORT

(2012)检字 JDL265 号
Ref: 2012JDL265

委托单位 深圳市沃尔核材股份有限公司
Client Shenzhen Woer Heat-Shrinkable Material Co., Ltd.

试样说明
名称: 8.7/15 kV 欧式 250 A 可分离连接器
型号规格: WEZT 15/250 1×50
制造厂: 深圳市沃尔核材股份有限公司

试品编号: DL 2012-265
制造日期: 2012年04月
取样方式: 送样

Description of Samples

Name of Test Samples: 8.7/15 kV continental 250 A separable connector
Type and Size: WEZT 15/250 1×50
Manufacturer: Shenzhen Woer Heat-Shrinkable Material Co., Ltd.
Sample No.: DL2012-265
Year of Manufacture: Apr., 2012
Sampling Way: taken by client self

检测标准

GB/T 12706.4-2008 额定电压 1 kV (Um=1.2kV)到 35 kV (Um=40.5 kV)挤包绝缘电力电缆及附件 第 4 部分: 额定电压 6 kV (Um=7.2 kV)到 35 kV (Um=40.5 kV)电力电缆附件试验要求
IEC 60502-4:2005 额定电压 1 kV(Um =1.2 kV) 到 30 kV(Um =36 kV)挤包绝缘电力电缆及其附件 第 4 部分: 额定电压 6 kV(Um =7.2 kV)到 30 kV(Um =36 kV)电缆附件试验要求

Specification

GB/T 12706.4-2008 Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Um=1.2 kV) up to 35 kV (Um=40.5 kV) — Part 4: Test requirements on accessories for cables with rated voltages from 6 kV (Um=7.2 kV) up to 35kV (Um=40.5 kV)
IEC 60502-4:2005 Power cables with extruded insulation and their accessories for rated voltages from 1 kV(Um =1.2 kV) up to 30 kV(Um =36 kV) Part 4: Test requirements on accessories for cables with rated voltages from 6 kV(Um =7.2 kV) up to 30 kV(Um =36 kV)

检测类型 型式试验

Category of Test Type tests

检测日期 2012-05-09~2012-07-16
Date of Testing 2012-05-09~2012-07-16

检测结论 根据 GB/T 12706.4-2008 和 IEC 60502-4:2005 标准, 对深圳市沃尔核材股份有限公司送检的 WEZT 15/250 1×50 型 8.7/15 kV 欧式 250 A 可分离连接器样品进行检测, 型式试验项目合格。

Conclusion The type of WEZT 15/250 1×50 8.7/15 kV continental 250 A separable connectors taken to test by client self have passed the type tests specified in GB/T 12706.4-2008 and IEC 60502-4:2005.

检测人员: 李东强 韩卫京
Inspected and Tested by Li Dongsheng Han Weijing

校核: 杨博 审核: 阎孟昆
Checked by Miao Fuguo Examined and verified by Yan Mengkun

批准: 黄维民 签发日期: 2012-07-31
Approved by Huang Weimin Date of issue: 2012-07-31
China-qitc.sgepri.sgcc.com.cn

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Page 1 of 12

电力工业电气设备质量检验测试中心
QUALITY INSPECTION AND TEST CENTER FOR EQUIPMENT OF ELECTRIC POWER
检测报告
INSPECTION REPORT

(2011)检字 JDL644 号
Ref: 2011JDL644

委托单位 深圳市沃尔核材股份有限公司
Client Shenzhen Woer Heat-Shrinkable Material Co., Ltd.

试样说明

名称: 24 kV 屏蔽型欧式可分离连接器
型号规格: WEB 24-630 1×185
制造厂: 深圳市沃尔核材股份有限公司

试样编号: DL 2011-646
制造日期: 2011年11月
取样方式: 送样

Description of Samples

Name of Test Samples: 24 kV screened continental separable connector
Type and Size: WEB 24-630 1×185 Sampling Way: taken by client self
Manufacturer: Shenzhen Woer Heat-Shrinkable Material Co., Ltd.
Sample No: DL 2011-646 Year of Manufacture: Nov., 2011

检测标准

GB/T 12706.4-2008 额定电压 1 kV ($U_m=1.2kV$)到 35 kV ($U_m=40.5 kV$)挤包绝缘电力电缆及附件 第 4 部分: 额定电压 6 kV ($U_m=7.2 kV$)到 35 kV ($U_m=40.5 kV$)电力电缆附件试验要求
IEC 60502-4:2005 额定电压 1 kV ($U_m=1.2 kV$)到 30 kV ($U_m=36 kV$)挤包绝缘电力电缆及其附件 第 4 部分: 额定电压 6 kV ($U_m=7.2 kV$)到 30 kV ($U_m=36 kV$)电缆附件试验要求

Specification

GB/T 12706.4-2008 Power cables with extruded insulation and their accessories for rated voltages from 1 kV ($U_m=1.2 kV$) up to 35 kV ($U_m=40.5 kV$) — Part 4: Test requirements on accessories for cables with rated voltages from 6 kV ($U_m=7.2 kV$) up to 35kV ($U_m=40.5 kV$)

IEC 60502-4:2005 Power cables with extruded insulation and their accessories for rated voltages from 1 kV ($U_m=1.2 kV$) up to 30 kV ($U_m=36 kV$) Part 4: Test requirements on accessories for cables with rated voltages from 6 kV ($U_m=7.2 kV$) up to 30 kV ($U_m=36 kV$)

检测类型 型式试验

Category of Test Type tests

检测日期 2011-11-21~2012-02-07

Date of Testing 2011-11-21~2012-02-07

检测结论 根据 GB/T 12706.4-2008 和 IEC 60502-4:2005 标准, 对深圳市沃尔核材股份有限公司送检的 WEB 24-630 1×185 型 24 kV 屏蔽型欧式可分离连接器样品进行检测, 型式试验项目合格。

Conclusion The type of WEB 24-630 1×185 24 kV screened continental separable connectors taken to test by client self have passed the type tests specified in GB/T 12706.4-2008 and IEC 60502-4:2005.

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China Electric Power Research Institute
Quality Inspection and Test Center for Electric Equipment
of Power Industry
Test Report



EETC2014DL098J

1 Client

SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO.,LTD.

2 Sample Description

Name: 8.7/15kV screened separable connector
Type & Size : WEB(K) III-15/630 3×185
Manufacturer: SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO.,LTD.
Manufacture Date: Mar., 2014
Sample No./Details:DL2014-098

3 Standards/Specifications

GB/T 12706.4-2008 Power cables with extruded insulation and their accessories for rated voltages from 1 kV ($U_m=1.2 kV$) up to 35 kV ($U_m=40.5 kV$) — Part 4: Test requirements on accessories for cables with rated voltages from 6 kV ($U_m=7.2 kV$) up to 35kV ($U_m=40.5 kV$)

IEC 60502-4:2010 Power cables with extruded insulation and their accessories for rated voltages from 1 kV ($U_m=1.2 kV$) up to 30 kV ($U_m=36 kV$) Part 4: Test requirements on accessories for cables with rated voltages from 6 kV ($U_m=7.2 kV$) up to 30 kV ($U_m=36 kV$)

4 Test Category

Type Tests

5 Test Date

24/03/2014-28/05/2014

6 Conclusion

The 8.7/15 kV screened separable connectors, the type and size of which is WEB(K) III-15/630 3×185 taken to test by the client's own self have passed the type tests specified in GB/T 12706.4-2008 and IEC 60502-4:2010.

Note: In the event of any difference in meanings of the text, the Chinese report shall take priority over the English version.

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